

US EPA ARCHIVE DOCUMENT

**LON C HILL REDEVELOPMENT PROJECT**  
**LON C. HILL, LP**

**GT SU/SD Emission Rates per Unit Summary Table <sup>(1)</sup>**

Air Pollutant	Max. Hourly Emission Rate (lb/hr) <sup>(2)</sup>	Annual Emission Rate (tpy) <sup>(3)</sup>
NOx	206.80	29.60
CO	3,137.20	377.59
VOC	359.70	46.24
NH <sub>3</sub>	34.00	-

**Notes**

(1) Proposed emission rates per gas turbine startup/shutdown.

(2) Proposed maximum hourly emissions represent the maximum 1-hr emission rates due to any startup or shutdown event.

- Data as provided by vendor

- Hourly SO<sub>2</sub>, PM<sub>10</sub>/PM<sub>2.5</sub> and H<sub>2</sub>SO<sub>4</sub> emission rates are expected to be within the routine operations limits, therefore no SU/SD hourly emission rates are proposed for these pollutants.

- Hourly NH<sub>3</sub> emissions rate could exceed routine operation levels during certain startup scenarios. Based on operational data from a similar facility, startup emission rates may be as high as 34 lb/hr. Because the frequency of events is limited, annual emission rates are not impacted.

(3) Annual emissions represent the sum of total proposed annual startups and shutdowns.

- Annual SO<sub>2</sub>, PM<sub>10</sub>/PM<sub>2.5</sub>, H<sub>2</sub>SO<sub>4</sub>, and NH<sub>3</sub> emission rates will not be higher than those occurring during routine operations, therefore no SU/SD annual emission rates are proposed for these pollutants.

**Startup/Shutdown Events Characteristics**

Air Pollutant	Cold Startup				Warm Startup				Hot Startup				Shutdown			
	Max. Emission Rate (lb/hr) <sup>(1)</sup>	Emission Factor (lb/event) <sup>(1)</sup>	Event Duration (min) <sup>(2)</sup>	No. Events per Year <sup>(3)</sup>	Max. Emission Rate (lb/hr) <sup>(1)</sup>	Emission Factor (lb/event) <sup>(1)</sup>	Event Duration (min) <sup>(2)</sup>	No. Events per Year <sup>(3)</sup>	Max. Emission Rate (lb/hr) <sup>(1)</sup>	Emission Factor (lb/event) <sup>(1)</sup>	Event Duration (min) <sup>(2)</sup>	No. Events per Year <sup>(3)</sup>	Max. Emission Rate (lb/hr) <sup>(1)</sup>	Emission Factor (lb/event) <sup>(1)</sup>	Event Duration (min) <sup>(2)</sup>	No. Events per Year <sup>(3)</sup>
NOx	207	351	241	10	206	240	136	50	158	171	93	200	37	37	25	260
CO	3,137	4,161			2,961	3,021			2,168	2,198			473	473		
VOC	360	482			351	354			260	262			68	68		

**Notes:**

(1) Maximum emission rate (lb/hr) and emission factors (lb/events) per vendor data times a 10% safety factor.

(2) Event duration per vendor data.

(3) No. of events per year based on vendor data.